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Notice of Allowability	Application No.	Applicant(s)
	10/743,171	JACOBS ET AL.
	Examiner	Art Unit
	An T. Luu	2816
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>Amendment filed on 1-13-06</u> .		
2. The allowed claim(s) is/are <u>2,4-6,8-18,20,21,23-25,27-30 and 32-37</u> .		
 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some* c) None of the: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements 		
noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. 		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Summary Paper No./Mail Da 8), 7. ☑ Examiner's Amendr	te
		IIMOTHY P. CALLAHAN SUPERVISORY PATENT EXAMINER

U.S. Patent and Trademark Office PTOL-37 (Rev. 7-05) Notice of Allowability

TECHNOLOGY CENTER 2800
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EXAMINER'S AMENDMENT

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1. Authorization for this examiner's amendment was given in a telephone interview with Mr. Daniel Swayze, attorney of record, on 2-7-06.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows: in claim 18, line 1, "circuit of claim 1 further" has changed to --circuit of claim 4 further--. And in claim 36, line 1, "method of claim 31 wherein" has changed to --method of claim 32 wherein--.

- 3. The following is an examiner's statement of reasons for allowance: Applicant has amended claims to incorporate allowable features indicated in the previous Office Action.

 Specifically, none of the prior art teaches or fairly suggests, among other things, the following limitations:
 - The first voltage source is operative to provide a voltage level equal to the first negative voltage level at the output voltage node ramps down from 0 volts to a first negative voltage level as required by claims 4 and 23.
 - The first ramped up voltage signal applied to the input voltage node ramps up from a second negative voltage level to 0 volts as required by claim 5.

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- The level shifting circuitry is operative to level shift a second ramped up voltage signal applied to the input voltage node to the first ramped up voltage signal provided at the second terminal of the input resistor as required by claims 8 and 27.

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- The controlled bias current source coupled to the gate of the first transistor, the controlled bias current source being operative to bias the first transistor within its active operating region by applying a controlled current to the gate of the first transistor as required by claim 32.
- The controlled bias current source is operative to apply the controlled current to the gate of the first transistor after the first ramped up voltage signal ramps to a predetermined voltage level and after a predetermined time delay, thereby reducing an on-resistance between the drain and the source of the first transistor as required by claim 34.
- A third resistor coupled between the first circuit node and the gate of the first transistor, wherein a voltage across the third resistor is operative to provide compensation for a voltage across the gate and the source of the first transistor as required by claim 29. And,
- A combination of the first transistor and the feedback resistor forms a closed control loop, and further including a controllable switch disposed within the control loop, the switch being controllable to open before the controlled current is applied to the gate of the first transistor' by the controlled bias current source as required by claim 37.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 571-272-1746. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

An T. Luu 2-8-06